

Progress for the week 8-11 to 8-17

1-More chips made for Sonali.

Varying the procedure for the fabrication of the 4cm chips didn't change the fact that the chips are becoming stiffer after the UV irradiation and would eventually crack if exposed to heat from the carver. Hence 2 cm chips are adopted.

2-The 2 cm chips made do not look very promising. Still thinking about would might have changed from the old procedure till now. The only thing I can think of is the carver optimization which made reading on the thermocouples realistic compared to 12 degree deviation.

3-Silica optimization plan has been laid out and now need to learn running the chips with Sonali to carry out the lambda experiment within next week.

4-Lambda phage DNA was received. Alleged concentration is 445ng/ul. using nanodrop it was found to be 365ng/ul It was aliquot and stored in the freezer.

5-1mm 2 cm SU-8 wafer was dried and broken after hard bake. A step that seemed unnecessary turned out to be vital for thick features.

6-Another 4 inch wafer with 1mm SU-8 was saved to be used later if needed.

7-Using the Resin mold of 1mm thick 4 cm channels broke under the carver pressure. Using PTFE might have helped.

8-The Vacuum chuck for the Si wafers is ready.

Plans for the week 8-18 to 8-24

1-Learn chip running process from Sonali

2-make chips for lambda phage optimization

3-2 and 4 cm fixture design is ready. Give to the machine shop

4-Get trained with Andy on SEM and perhaps take the qualifier.

5- By the end of the week run the lambda phage samples.

6- Make a silicon wafer for a resin mold that would support wire embossing in a fixed location. Since we are using guitar wires we need then wires to be at a fixed location to enable us using the fixture.

--	--

